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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,299	03/13/2001	Shigenabu Sekine	46-191	9283

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MANELLI DENISON & SELTER  
2000 M STREET NW SUITE 700  
WASHINGTON, DC 20036-3307

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 11/17/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

C109

**Office Action Summary**

Application No.

09/804,299

Applicant(s)

SEKINE, SHIGENABU

Examiner

George P Wyszomierski

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 1-57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 58, 59 and 62-64 is/are rejected.
- 7) ☒ Claim(s) 60 and 61 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/20/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. Applicant's election with traverse of Group III, claims 58-64 and the iron species in Paper No. 8 is acknowledged. Because no specific reasons for traverse were stated in Applicant's response, this election is being treated as an election without traverse.

2. Claims 58, 59, 61, 63 and 64 are objected to because of the following informalities:

a) The terminology used in claim 58 is confusing. First, it appears that the term  $1-300\mu\text{m}\pm 1\%$  refers to substantially all of the claimed particles being of a size within 1% of an average size, that average size being somewhere within the range of  $1-300\mu\text{m}$ . Then, based upon the disclosure at page 10, lines 15-22 of the specification, it appears that the phrase "uniformity of size...to  $\pm 10\%$ " refers to some amount between 60 and 70% of the claimed particles being of a shape which deviates by no more than 10% from a perfect sphere. The examiner is interpreting the claim in the above manner. If any of the above is incorrect, appropriate correction or explanation should be supplied in response to this Office Action.

b) In claim 59, line 3, claim 63, line 2, and claim 64, line 2, "of more" should be changed to --or more--.

c) In claim 61, line 2, it appears that " $\text{Pr}_w$ " should read -- $\text{PrO}_w$ --.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 58, 62 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chun et al. (U.S Patent 5,266,098).

Chun discloses uniformly sized spherical metal droplets that most preferably vary in diameter by not more than  $\pm 1\%$ . The droplet size is 10-500 microns, and column 5, line 67 of Chun indicates that iron is a suitable metal in the prior art. Chun does not disclose any specific example of iron products, and the size range disclosed by Chun is somewhat broader than that presently claimed. However,

a) Iron is considered suitable by Chun, as mentioned supra, and

b) The diameters obtained in the examples of Chun fall within the presently claimed range.

Consequently, the examiner's position is that it would have been obvious to one of ordinary skill in the art to substitute iron for the metals used in the Chun examples and thereby obtain iron products according to the claimed invention.

5. Claims 58, 59, 62, 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekine et al. (U.S Patent 5,865,873).


Sekine discloses obtaining Nd-Fe-B-Co powder of spherical shape by subjecting acicular shaped powder of the desired composition to heating in hydrogen for a period of time to convert the powder to a spherical shape. See example 6 of Sekine. The prior art does not specify the particle size or percentage of spherical shape as defined in the instant claims. However, these features would appear to be factors dependent largely

upon the starting material used by Sekine, i.e. one would choose a starting material of an appropriate size so that one will obtain a desired size spherical powder following treatment. Further, it is noted that Sekine does not state that any shape other than spherical is present in example 6, but rather that the shape of the powder evolves with an increasing degree of treatment. It thus appears that the substantial majority of the particles therein are of substantially spherical shape. Consequently, the examiner's position is that one of ordinary skill in the art would have easily been able to produce powders of a size and shape according to the instant claims given the disclosure of Sekine et al.

6. Claims 60 and 61 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or suggest spherical rare earth-iron-boron-rare earth oxide powders as recited in the instant claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

GPW  
November 6, 2003

  
GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER